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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,516	05/10/2005	Mineki Taoka	70591-021	5301
20277 7590 03/06/2008 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			EXAMINER NATNAEL, PAULO M	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 03/06/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/509,516	<b>Applicant(s)</b> TAOKA ET AL.	
	<b>Examiner</b> PAULOS M. NATNAEL	<b>Art Unit</b> 2622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-43 is/are allowed.
- 6) ☒ Claim(s) 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9-28-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim **44** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. While the specification discloses the integrator or rod prism 3 as comprising a hollow rod, the specification does not disclose a rod prism in which the light entrance direction and the light exit direction differ. Nor do the drawings show except one direction of the light from the light source to through integrator and beyond. Thus, one skilled in the art would not be able to make and use the invention as claimed without undue experimentation.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 44 is rejected under 35 U.S.C. 102(e) as being anticipated by McGettigan et al., U.S. Pat. 6,827,450.

McGettigan discloses scrolling color projection system including an integrating light pipe re-circulating color to improve efficiency (corresponding to the claimed illuminating device for circularly deflecting in receiving light irradiated from a light source). A number of color filters, such as blue, green, and red filters, on the end of the light pipe transmit a selected color and reflect the remaining light back into the light pipe, where it is spatially homogenized and re-circulated back to the output of the light pipe. The re-circulated homogenized light illuminates the filters, and the process repeats. Thus, most of the light from the light source [84] eventually is transmitted through one of the color filters. (See, Abstract, emphasis added). Specifically, McGettigan, as illustrated on FIG. 6A, discloses an integrating 3-color light pipe 82 (which corresponds to the claimed rod prism or the integrator in a folded type). The integrating light pipe includes three color filters. Each filter transmits the indicated color (thus forming a color "beam") and reflects the remaining light back into the integrating light pipe (col. 7, lines 41+; Fig.6A) which corresponds to the cylindrical member having light transmitters and reflectors. Thus, McGettigan discloses all claimed subject matter in that the 3-color pipe 82 corresponds to the claimed rod prism in a folded type and the cylindrical member having light transmitters and reflectors.

***Allowable Subject Matter***

5. Claims **1-43** are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose the following combination of limitation for projection type video display device comprising: light deflecting means for circularly deflecting, in receiving irradiated light and transmitting the received light, the light; color separating means for separating the light into lights in the three primary colors and respectively introducing the lights into three hold type display elements; projecting means for recombining image lights in the respective colors obtained through the hold type display elements and projecting the recombined image lights; and element driving means for feeding a pixel-driving signal to each of the hold type display elements, and in that the amount of light which will be wasted in producing said circular deflection is reduced by utilizing at least one of the functions including condensing, more than twice reflecting, and refracting, and in that the lights in the respective colors condensed in smaller areas than those of the element are circularly scrolled on the hold type display elements, as in claim 1.

***Conclusion***

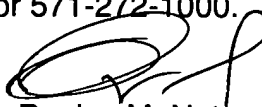
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morgan (US 7,061,512) discloses constant-weight bit-slice PWM method and system for scrolling color display systems.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAULO S M. NATNAEL whose telephone number is (571)272-7354. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Paulos M. Nathael  
Primary Examiner  
Art Unit 2622

March 1, 2008